Work Order ID 98075 *98075* Page 1 Tuesday, March 05, 2013 1:14:22 PM Item ID: D2199-25 Accept *N900040100* Setup Start **Revision ID:** Item Name: Strut Details Start Qty: 4.00 **Start Date:** 3/5/2013 **Cust Item ID: Required Date: 3/19/2013** Req'd Qty: 4.00 **Customer:** Reference: Run Date:/3-03-5 Process Plan: Tooling: **Approvals:** Date: Stop Date: QC: **SPC (Y/N):** Date: Sequence ID/ Operation Set Up/ **Tool ID** Tool # Plan Reject Accept Reject Insp. Work Center ID Description Qty Code Number Stamp **Run Hours Oty Draw Nbr Revision Nbr** D2199 Rev E1 100 0.00 4 \$ FF 13-03-07 NC BRAKE *100* Brake NC 0.00 Memo Brake NC Punch per Dwg D2199 and Spec Control Dwg D2638 110 0.00 Small Fab *110* Small Fab 0.00 Memo Small Fab Deburr. 120 QC5- Inspect part completeness to step on W/O 0.00 133 12 QC Memo

Quality Control

DQA:	Date:	▼	

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

									QA Closed:	Date:			
Work Orde	r:				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS			
Part N NCR N	o				Rework Scrap Use-as-is Work Order Update	Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	ab Prod. Eng. Coor. Qualiting Rec/Store/Packaging Othe				
Root		Ι		Descri	ption of work order update	Initial	Act	tion	Sign &				
Cause	Date	Step	Qty	I	or Non-conformance	Chief Eng		ription	Date	Verification	QC Inspector		
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													
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Landin	g Gear		······		General		· · · · · · · · · · · · · · · · · · ·		 				
	Bending Centre Not Concentric to O/S Cracks Crushed/Crimped. Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion				Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish	Inspection Instruct Instruct Mainte Mislabe Misread Offset Out of (Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled Misread Offset Out of Calibration			tolerance ct issing Vrong 'Surge	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other		
F	Turning Sequence Wave/Twist in Tube				Folio	\vdash	Out of Sequence Outside Dimensions						

Work Orde Tuesday, March				*980	75*		Page 2				
Revision ID:	D2199-25 Strut Details			Accept	*N900040	1100*	Setup	Start Stop	*NS1* *NS2*		
	3/5/2013	Start Qty: 4.00 Req'd Qty: 4.00		4* 4*	Cust Item ID: Customer:				14117		
Approvals:		in:	Date:		Date:		Run	Start Stop	*NR1* *NR2*		
Sequence ID/ Work Center II 130 *120* Powdercoat Powder Coating)	Operation Description White Gloss(Ref. 25.7) Memo START TIME OVEN TEME	E: Q	Set Up/ Run Hours 0.00 0.00 0.00 0.00	Tool ID Tool #	Code Qty	Qt	y l	Reject Insp. Number Stamp		
*140 *140* QC Quality Control		QC3- Inspect Part Finish Memo		0.00 27	3 13		<u> </u>				
150 *150* Packaging		Identify as per dwg & Sto	ck Location:	5 Had. 0.00		<u>4</u>	<u> </u>				

Packaging

		DQA:	Date:	
ICR· Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE			

											QA Closed:	Date	e:
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		Cracks			<u> </u>	Broken/Damaged	-	4	ion Incomplete	,, , 	Part Incorre	F	Weld
		Crushed/	Crimped.	-	<u> </u>	Burrs	-	4	tions Incomplete	/Unclear	Part Lost/M		Wrong Stock Pulled
		Cuffs			-	Contamination	-	4	enance	<u> </u>	Part Moved		
	-	Heat Trea		T. L :	-	Countersink	-	Mislabe			Positioned \		Other
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Work Ord Tuesday, March				*98075*							Page 3
Item ID: Revision ID:	D2199-25			Accept	*N900	040	100)* s	Setup Star	IA	S1* S2*
Item Name: Start Date: Required Date Reference:	Strut Details 3/5/2013 : 3/19/2013	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item I Customer:	D:				i N	57"
Approvals:	Process Pla	nn:	Date:	Tooling: SPC (Y/N):		nte:		F	Run Sta Sto	רו" מ	R1* R2*
Sequence ID/ Work Center l	ID	Operation Description OC21- Final Inspection	- Work Order Release	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

0.00

Memo

160

Quality Control

pl 13-03-13

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NCR: Ye	s / No			WORK ORDER NON-	CONFORI	MANCE / UPD	DATE	QA Closed:	Date:		
Nork Order	:			DISPOSITION				PARTMENT			
Part No	o			Rework Scrap Use-as-is	⊣ I	Skid-tube Machining moforming	Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. e/Packaging	Engineering Quality Other	
NCR No)			Work Order Update		Large Fab Composite Supplier					
Root				Description of work order update	Initial	Acti	on	Sign &			
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DOA

Date:

FAULT CATEGORY Landing Gear General Grain Ovalized Pressure/Forced Bend Bending BOM/Route Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S Hardware Cracks Broken/Damaged Inspection Incomplete Weld Part Incorrect Part Lost/Missing Wrong Stock Pulled Crushed/Crimped. Burrs Instructions Incomplete/Unclear Part Moved Cuffs Contamination Maintenance Countersink Positioned Wrong Heat Treat Mislabeled Power Loss/Surge Other Inspection Strip in Tube Cut Too Short Misread Drill Holes Offset Ripples in Bend Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Out of Sequence Finish

Outside Dimensions

Wave/Twist in Tube

Folio

Other
Process
Supplier
Training
Unapproved

Picklist Print

Tuesday, March 05, 2013 1:14:28 PM

Work Order ID: 98075

98075

Parent Item:

D2199-25

D2199-25

Parent Item Name: Strut Details

Start Date: 3/5/2013

Required Date: 3/19/2013

Page 1

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP REV:A 13.03.05 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TR0.750W.049		Purchased	No			100	f	411.6911	1.66	6.989474			
M304TR	0.750W	049							**		FF	13	-03-07

304 RD Tube .750 x .049W

Location	Loc Qty	Loc Code	
MAT017	411.6911325		
122312	26.37		
122468	0.0000325		
124768	385.3211		6.98194
			/ / /

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Work Orde	~~.					DISPOSITION			AGAI	NST DE	PARTMENT	/PROCESS		
Work Orde	=1.					Rework	7		Skid-tube Crosst	ube		Water Jet	\neg	Engineering
Part N	۱o. ₋			· · · · · · · · · · · · · · · · · · ·		Scrap Use-as-is		r	Machining Small	Fab		d. Eng. Coor. re/Packaging		Quality
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Root					Descri	ption of work order update		Initial	Action	· · · · · · · · · · · · · · · · · · ·	Sign &			
Cause		Date	Step	Qty	C	or Non-conformance	Cr	nief Eng	Description		Date	Verification	٦	QC Inspector
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Equip/Tooling				1										
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Other						A 3								
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		Bending			<u></u>	Bend	\perp	Grain			Ovalized			Pressure/Forced
	Ш	Centre N	ot Conce	ntric to C)/S	BOM/Route	_	Hardwa	re	ļ	Over/Under		-	Temperature/Cure
		Cracks				Broken/Damaged		-1	on Incomplete		Part Incorre			Weld
	-	Crushed/	Crimped.		L	Burrs		⊣	ions Incomplete/Unclear		Part Lost/M	_		Wrong Stock Pulled
	\vdash	Cuffs			<u></u>	Contamination		Mainte			Part Moved			
	Ш	Heat Trea	at			Countersink	L	Mislabe	led	<u> </u> _	Positioned \	_		
		Inspectio	n Strip in	Tube		Cut Too Short	_	Misread	i		Power Loss,	/Surge		Other
		Ripples ir	n Bend			Drill Holes		Offset			_			

Out of Calibration
Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio



E 98.04.28		C C CARCON DATE	PAPRIOVED	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA PREV. E D2199 TITLE STRUT DETAILS NEW ISSUE ADDED -11, -13, AND -15 ADDED -17 AND -19
C D 98.04.28		00 A	1993	1, -13, AND
E 98.04.28 E) 98.04.28	35.05 KE	J O		ADDED -17 AND -19 ADDED -21
E1 . (p) = 02.03.22	ż	m	98.04.28	ADDED -23 AND -25 PER TSR A565M ADDED TEMPLATE & SPEC CTRL DWG REDRAWN IN CAD
	I AL	m,	p+ 02.03.22	ADD FINISH

-	A	
	B	<i>/</i> -0
	D DIA PUNCH BOTH ENDS PER SPEC CONTROL DRAWING D2638	C OIA
		<u> </u>

		Α	В	C	D	(Market)
	02199-1	18.30	17.50	0.257	0.257	
	D2199-3	5.80	5.00	0.257	0.257	
	D2199-5	22.64	21.84	0.257	0.316	•
-	D2199-7	14.74	13.94	0.257	0.257	
	D2199-9	16.52	15.72	0.257	0.257	
	D2199-11	23.60	22.80	0.257	0.316	(B)
	D2199-13	15.96	15.16	0.257	0.257	1 1
	D2199-15	17.57	16.77	0.257	0.257	(B)
	D2199-17	28.05	27.25	0.257	0.316	(O
	02199-19	18.90	18.10	0.257	0.257	(C)
	D2199-21	10.80	10.00	0.257	0.257	0
_	02199-23	26.18	25.38	0.257	0.316	(E)
20,18	02199-25	19.93	19.13	0.257	0.257	
~~.	D2199-27	27.34	26.54	0.257	0.316	3 100.10.13
	D2199-29	21:11	20.31	0.257	0.257	3 \$ 00. 10.13 (Poro. 10.13

- NOTES:

 1. MAKE PER TEMPLATE DT2199-XX WHERE XX IS THE RESPECTIVE DASH NUMBER

 2. MATERIAL: AISI 304/316 STAINLESS STEEL TUBE \$0.750 \times 0.049 WALL

 3. FINISH: POWDER COAT WHITE (4.3.5.2) PER MART QSI QS 43/EN

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by DART AEROSPACE LTD

												DQA:	Dat	e:	<.∙
NCR:	Yes	/ No				WORK ORDER NON	-CO	NFORM	MANCE / U	PDATE					
												QA Closed:	Dat	e:	
Work Ord	rder:					DISPOSITION		AGAINST D			NST DE	PARTMENT	/PROCESS		
Part No				Rework Scrap Use-as-is Work Order Update		Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Large Fab Composite			Fab ning	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier			Engineering Quality Other		
Root					Descri	tion of work order update	\top	Initial	. д	ction		Sign &	· · · · · · · · · · · · · · · · · · ·		
Cause		Date	Step	Qty		or Non-conformance		hief Eng	· Des	scription		Date	Verification	۱	QC Inspector
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	Cracks			Broken/Damaged		Inspection Incomplete			<u> </u>	Part Incorre	ct	\vdash	Weld		
	Crushed/Crimped			Burrs		Instructions Incomplete/Unclear				Part Lost/M	issing		Wrong Stock Pulled		
	Cuffs			Contamination		Mainte	enance			Part Moved					
	Heat Treat			Countersink	L	Mislabeled				Positioned \	Wrong .		•		
	Inspection Strip in Tube			Cut Too Short		Misread				Power Loss/	'Surge		Other		

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Drill Holes Drawing

Finish Folio

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion